# SCIENTIFIC NOTES

**Cultivated Snapdragon a Host of Tobacco Budworm.**—*Heliothis virescens* (Fabr.), known as the Tobacco Budworm, has been reared locally a number of times, feeding on *Nicotiana Bigelovii* (Torr.) S. Wats., a native plant that grows as a weed in yards and vacant lots. Since this plant appears in midsummer, most of the rearings emerged in late summer. At hand is a specimen bearing the date "Emerged VIII.18.60."

In the fall of 1962 larvae of this species were found in large numbers on cultivated Snapdragon (*Antirrhinum majus* L.) in my own yard in San Jose, Calif. A considerable amount of damage was done, approaching defoliation on some plants. Both leaves and flower buds were eaten. Larvae were noted in early October. One was retained alive, pupated in a cell in earth 12 Novmber 1962, and emerged as an adult 19 March 1963. The wide difference in emergence dates (March, August) suggests that there must be a spring brood as well, but this brood has so far not been detected here. Adults of this moth appear at porch lamps occasionally, even in the city. *Heliothis virescens* seems to be one of the several species of moths able to survive in or adapt to suburban environment. —J. W. TILDEN, *San Jose State College, San Jose, California.*

**Predation by *Adelocera* and *Alaus* (Coleoptera: Elateridae).**—At Manzanita Lake, Lassen Volcanic National Park, on 13 June 1960, at dusk an individual of *Adelocera* was seen climbing a seedling pine about six feet in height. The beetle was first noticed when about one foot from the ground. It climbed with a jerky mechanical movement and finally climbed out onto a side limb near the top of the seedling. Here it began to feed on aphids that formed a colony at the tip of the limb.

The beetle was preserved and proved to be *Adelocera profusa* Canad. [= *Lacon brevicornis* (Lec.)]. The aphids appear to be *Dilachnus* sp., possibly *ponderosae* (Will.). The pine seedling was one of several among a group of mature cone-bearing *Pinus ponderosa* Doug. var. *Jeffreyi* Vasey, and presumed to belong with them.

On 10 July 1966, in a stump of Ponderosa Pine near Long Barn, Tuolumne Co., California, numerous larvae of *Chalcophora angulicollis* (Lec.) were found together with several larvae of *Alaus melanops* Lec. Some of this wood was brought to San Jose, and from it a number of specimens of *Chalcophora* eventually emerged. Some of the buprestid larvae were placed in a large can with chips of wood and a larva of *Alaus* was inadvertently included. When the can was examined about a month later, only the elater larva remained, it having eaten about a dozen larvae of *Chalcophora* in that time. The prey-predator relationship between *Chalcophora angulicollis* and *Alaus melanops* was observed also by Ronald Stecker of San Jose State College (personal communication) during field work in Idaho.—J. W. TILDEN AND BRUCE A. TILDEN.—*San Jose State College, San Jose, California.*